VERSION SHOWING CHANGES TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application:

IN THE CLAIMS:

Amend the claims as follows:

1. (currently amended)A method of opening a vehicle door in a doorway of a vehicle body, the method comprising:

rotating the [[such]] vehicle door in a horizontal plane of motion until the [[such]] vehicle door substantially clears the [[such]] vehicle body; and

then rotating the [[such]] vehicle door in a vertical plane of motion until the [[such]] vehicle door substantially clears the doorway ~~such door way~~.

2. (currently amended)The method of claim 1, further comprising installing a hinge between the vehicle door and a vehicle frame of the vehicle, the hinge comprising a chassis mounting plate, a swingarm, and a bi-directional rotation mechanism and a sag adjustment device coupled to at least one of the chassis mounting plate and the swingarm, the installing step comprising:

fastening the ~~providing a~~ chassis mounting plate ~~securely fastened~~ to the [[such]] vehicle frame, the chassis mounting plate comprising a first portion of the sag adjustment device;

fastening the ~~providing a~~ swingarm ~~securely fastened~~ to the [[such]] vehicle door, the swingarm comprising a second portion of the sag adjustment device, the ~~;~~ ~~providing a~~ bi-directional rotation mechanism allowing motion of the door in the ~~a first~~ horizontal plane and the ~~a second~~ vertical plane.

3. (currently amended)The method of claim 2, including the step of ~~wherein the bi-directional rotation mechanism prevents the~~ preventing motion of the door in the ~~second~~ vertical plane when the door ~~has not fully completed motion~~ is rotated in the [[first]] horizontal plane until the swingarm clears a stopping pin on the chassis mounting plate.

4-6. (canceled)

7. (new) The method of claim 2, wherein the first portion of the sag adjustment device comprises a sag adjuster screw and the second portion of the sag adjustment device comprises a sag adjuster guide, the method including bearing the screw against the sag adjuster device during rotation of the vehicle door in the horizontal plane of motion.

8. (new) The method of claim 7, further comprising adjusting the sag adjuster screw to fit the vehicle door to the doorway when the vehicle door is closed.

9. (new) The method of claim 2, wherein rotating the vehicle door in the horizontal plane of motion comprises preventing vertical motion of the vehicle door until the swingarm clears a stopping pin on the chassis mounting plate.

10. (new) The method of claim 2, further comprising fastening opposite ends of a spring to the chassis mounting plate and the swingarm, respectively, to at least partially counter balance the weight of the vehicle door.

11. (new) The method of claim 2, wherein the bi-directional rotation mechanism comprises a bi-hinge connected to the chassis mounting plate by bi-hinge supports, thereby allowing the vehicle door to rotate in the horizontal plane, and a bi-hinge rod connected to the swingarm and the bi-hinge, thereby allowing the vehicle door to rotate in the vertical plane.

12. (new) A method for retrofitting a vehicle door hinge connecting a vehicle door to a vehicle frame, comprising:

removing the vehicle door hinge;

fastening a chassis mounting plate to the vehicle frame; and

fastening a swingarm to the vehicle door, the swingarm being connected to the chassis mounting plate by a bi-directional rotation mechanism that allows the vehicle door to rotate in a horizontal plane and in a vertical plane relative to the vehicle frame.

13. (new) The method of claim 12, further comprising at least partially counter balancing the weight of the vehicle door by fastening opposite ends of a spring to the chassis mounting plate and swingarm, respectively.

14. (new) The method of claim 12, further comprising at least partially counterbalancing the weight of the vehicle door with at least one of a hydraulic actuator and an electrical actuator.

15. (new) The method of claim 13, wherein each of the chassis mounting plate and swingarm includes a spring mounting hole and wherein the step of fastening opposite ends of the spring comprises fastening the opposite ends of the spring to respective spring mounting holes in the chassis mounting plate and swingarm.

16. (new) The method of claim 12, further comprising adjusting a sag adjustment device on at least one of the chassis mounting plate and the swingarm to adjust the vehicle door such that the vehicle door fits with the vehicle frame when the vehicle door is closed.

17. (new) The method of claim 16, wherein the sag adjustment device comprises a sag adjuster screw on one of the chassis mounting plate and the swingarm and a sag adjuster guide on the other of the chassis mounting plate and the swingarm, the adjusting step comprising adjusting the sag adjuster screw.

18. (new) The method of claim 12, wherein the bi-directional rotation mechanism comprises a bi-hinge connected to the chassis mounting plate by bi-hinge supports, thereby allowing the vehicle door to rotate in the horizontal plane, and a bi-

hinge rod connected to the swingarm and the bi-hinge, thereby allowing the vehicle door to rotate in the vertical plane.

19. (new) A method for installing a hinge between a vehicle frame and a vehicle door, the hinge comprising a chassis mounting plate, a swingarm, a bi-directional rotation mechanism connecting the swingarm to the chassis mounting plate, and a swingarm angle adjuster, the method comprising:

fastening the chassis mounting plate to the vehicle frame;

fastening the swingarm to the vehicle door, the bi-directional rotation mechanism allowing rotation of the vehicle door in a horizontal plane and a vertical plane relative to the vehicle frame; and

adjusting the swingarm angle adjuster to adjust an angle of the vehicle door relative to the vehicle frame that is maintained during rotation of the vehicle door in the horizontal plane.

20. (new) The method of claim 19, further comprising removing a previous hinge from between the vehicle frame and the vehicle door.

21. (new) The method of claim 19, further comprising at least partially counter balancing the weight of the vehicle door by fastening opposite ends of a spring to the chassis mounting plate and swingarm, respectively.

22. (new) The method of claim 19 further comprising at least partially counter balancing the weight of the vehicle door with at least one of a coil spring, a gas strut, a hydraulic cylinder, a gas cylinder, and an electrical actuator.

23. (new) The method of claim 19, wherein the bi-directional rotation mechanism comprises a bi-hinge connected to the chassis mounting plate by bi-hinge supports, thereby allowing the vehicle door to rotate in the horizontal plane, and a bi-hinge rod connected to the swingarm and the bi-hinge, thereby allowing the vehicle door to rotate in the vertical plane.

24. (new) The method of claim 19, wherein the swingarm angle adjuster comprises a sag adjuster screw on one of the chassis mounting plate and the swingarm and a sag adjuster guide on the other of the chassis mounting plate and the swingarm, the adjusting step comprising adjusting the sag adjuster screw.

25. (new) A method for installing a hinge between a vehicle frame and a vehicle door, the hinge comprising a chassis mounting plate, a swingarm, and a bi-directional rotation mechanism connecting the swingarm to the chassis mounting plate, the method comprising:

fastening the chassis mounting plate to the vehicle frame;

fastening the swingarm to the vehicle door, the bi-directional rotation mechanism allowing motion of the vehicle door in a horizontal plane and in a vertical plane relative to the vehicle frame; and

fastening opposite ends of a spring to the chassis mounting plate and the swingarm, respectively, to at least partially counter balance the weight of the door.

26. (new) The method of claim 25, further comprising removing a previous hinge from between the vehicle frame and the vehicle door.

27. (new) The method of claim 25, wherein the hinge further comprises a swingarm angle adjuster, the method further comprising adjusting the swingarm angle adjuster to adjust an angle of the vehicle door relative to the vehicle frame that is maintained during motion of the vehicle door in the horizontal plane.

28. (new) The method of claim 27, wherein the swingarm angle adjuster comprises a sag adjuster screw on one of the chassis mounting plate and the swingarm and a sag adjuster guide on the other of the chassis mounting plate and the swingarm, the adjusting step comprising adjusting the sag adjuster screw.

29. (new) The method of claim 28, wherein the sag adjuster guide comprises a sag adjuster screw guide mechanism rotationally connected in the horizontal plane to the bi-directional rotation mechanism.